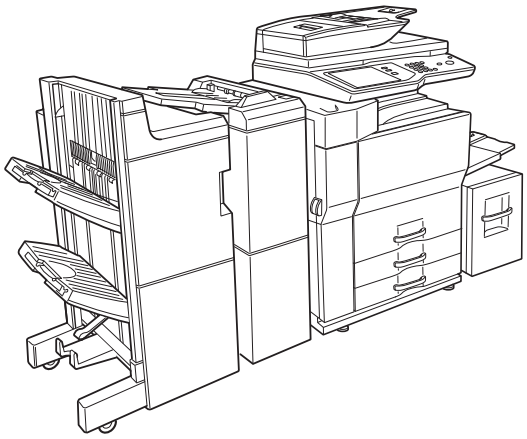
SHARP INSTALLATION MANUAL

DIGITAL MULTIFUNCTIONAL SYSTEM

MX-M623N
MX-M623U
MX-M753N
MODEL MX-M753U



Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

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The contents are subject to change without notice.

[1] MX-M623N/M623U/M753N/ M753U

1. Installing (use) conditions

Before installing the machine, check that the following installing (use) conditions are satisfied.

If the installing (use) conditions are not satisfied, the machine may not display full performances, resulting in troubles. It may also cause safety problems. Therefore, be sure to arrange the installing (use) conditions before setting up the machine.

No.	Content
1	Bringing space
2	Installing space
3	Power source (Capacity, fluctuation, safety)
4	Floor strength
5	Direct rays of the sun, dust, temperature, humidity, gases, chemicals

A. Bringing space

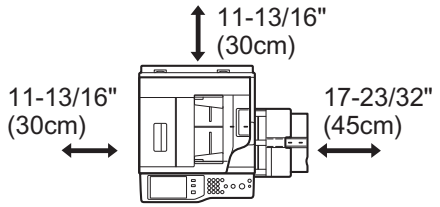
For installation of a large size machine, be sure to check that the door size is wide enough before bringing in.

B. Installing space

The following space must be provided around the machine in order to assure machine performances and proper operations.

If any option is installed, provide the additional space for installing it.

Adequate space must be provide behind the machine for proper ventilation heat and dust. If not, the machine cannot exhibit functions against heat and dust, causing some troubles.



C. Power source (Capacity, voltage, frequency, safety, plug)

If the power specifications are not satisfied, the machine cannot exhibit full performances and may cause safety trouble.

Strictly observe the following specifications.

(1) Power capacity

Check that the following power capacity is satisfied. If not, additionally provide a power source.

Current capacity

Japan: 20A or more

100V: 15A or more

200V: 10A or more

NOTE: Check the shape of the power plug of the machine, and insert it into a power outlet of the acceptable shape.

(2) Power voltage

Measure the voltage during copying to check that the voltage is in the range of the specified voltage ±10%.

If the voltage is outside the specified range, use thicker lead wires to reduce impedance.

(An electrical work is required.)

Use of a step-up transformer is also available. In this case, the capacity must be great enough for the max. power consumption of the machine.

(3) Power frequency, waveform

The frequency must be within the range of the specified frequency ±2%. If power waveform is deformed, a trouble may occur.

(4) Safety

Be sure to properly ground the machine.

Grounding (earth connection) must be performed before inserting the power plug into the power outlet.

When disconnecting the earth connection, be sure to disconnect the power plug from the power outlet in advance.

(5) Power plug

Check the shape of the power plug of the machine, and insert it into a power outlet of the acceptable shape.

D. Floor strength and level

This machine is considerably heavy and becomes heavier with an option installed.

The floor must be strong enough for assuring safety.

If the unit is not horizontally installed, the toner density control is not performed normally, degrading the copy quality.

If not, color shift or image distortion may occur.

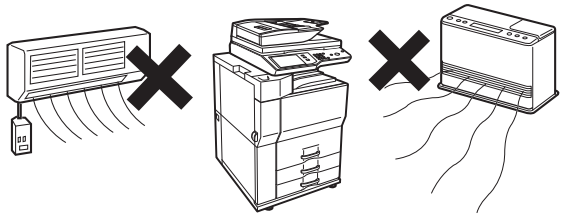
E. Direct rays of the sun, dust, temperature, humidity, gasses, chemicals, vibration

(1) Temperature and humidity

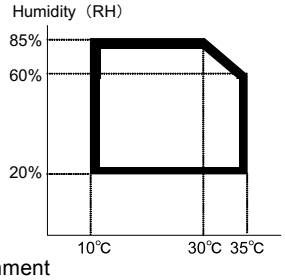
This machine is designed to perform properly under the specified temperature and humidity. If the temperature and humidity exceeds the specified range, the machine may not operate properly and or cause equipment failure.

Especially when the humidity is too high, paper absorbs humidity to cause a paper jam or dirty copy.

Do not install the machine near a heater, a cooler, or a humidifier.



Dew may be formed inside the machine to cause a trouble. Use enough care for ventilation.



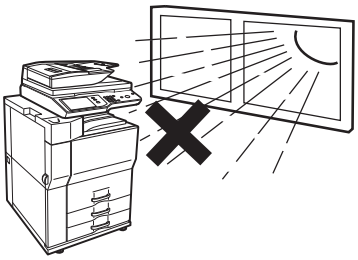
- Working environment
  Temperature: 10 to 35°C
  Humidity: 20 to 85% RH
  Atmospheric pressure: 590 to 1013hPa (altitude: 0 to 2000 m)

(2) Dust

If dust enters the machine, it may cause dirty copy and a paper jam, resulting in a shortened lifetime.

(3) Direct rays of the sun

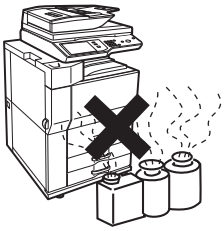
If the machine is installed under the rays of the sun, the exterior of the machine may be discolored and abnormal copies may be produced.



(4) Gases and chemicals

Do not install the machine at a place where there are gases and chemicals. Especially be careful to avoid installation near a diazo-type copier, which produces ammonium gas.

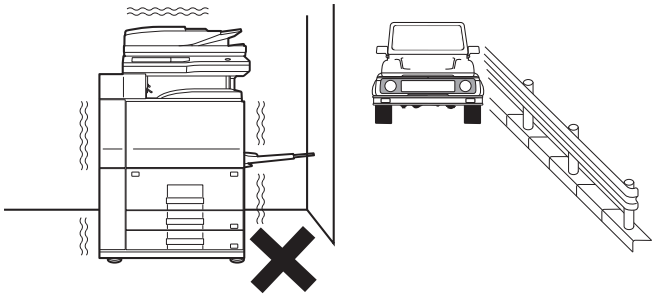
Copy quality may be adversely affected and a trouble may be caused.



(5) Vibration

Avoid installation near a machine which produces vibrations.

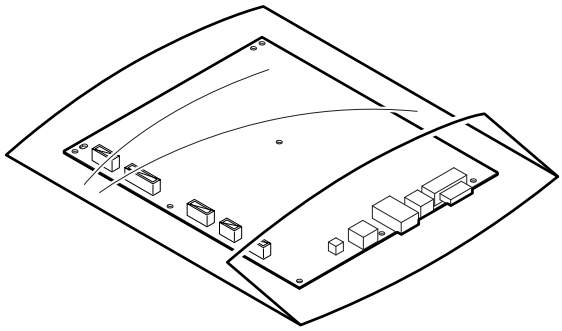
If vibrations are applied to the copier machine, copy images may be deflected and a trouble may be caused.



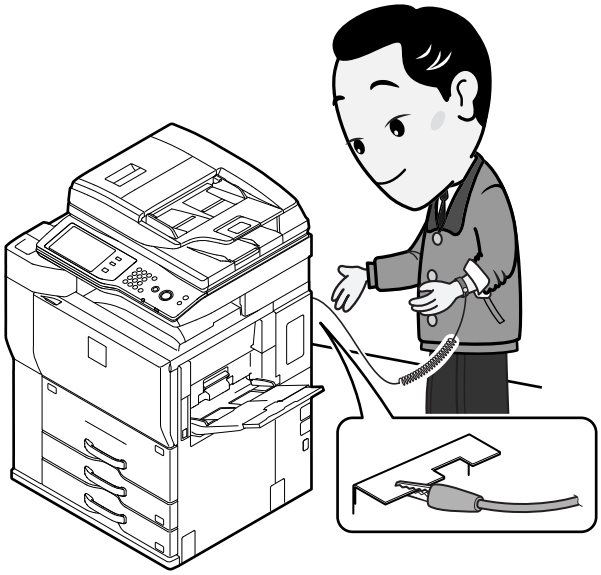
F. Note for handling PWB and electronic parts

When handling the PWB and the electronic parts, be sure to observe the following precautions in order to prevent against damage by static electricity.

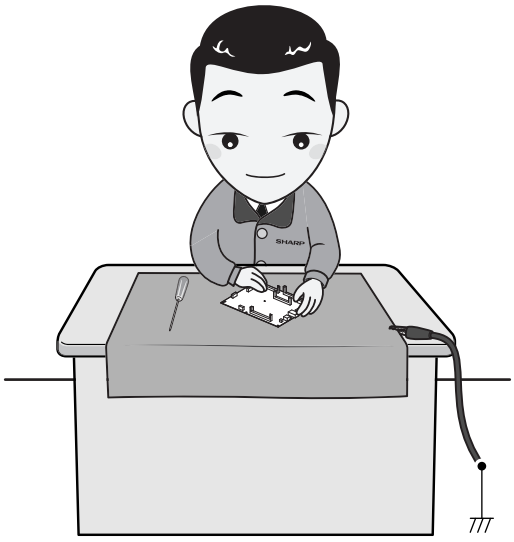
1) When in transit or storing, put the parts in an anti-static bag or an anti-static case and do not touch them with bare hands.



2) When and after removing the parts from an anti-static bag (case), use an earth band as shown below:
   - Put an earth band to your arm, and connect it to the machine.



   - When repairing or replacing an electronic part, perform the procedure on an anti-static mat.



G. Note for handling the drum unit, the transfer unit, the developing unit, and the fusing unit

When handling the OPC drum unit, the transfer unit, and the developing unit, strictly observe the following items.

If these items are neglected, a trouble may be generated in the copy and print image quality.

(Drum unit)

1) Avoid working at a place with strong lights.
2) Do not expose the OPC drum to lights including interior lights for a long time.
3) When the OPC drum is removed from the machine, cover it with light blocking material. (When using paper, use about 10 sheets of paper to cover it.)
4) Be careful not to attach fingerprints, oil, grease, or other foreign material on the OPC drum surface.

(Transfer unit)

1) Be careful not to attach fingerprints, oil, grease, or other foreign material on the transfer roller.

(Developing unit)

1) Be careful not to attach fingerprints, oil, grease, or other foreign material on the developing unit.

(Fusing unit)

1) Be careful not to put fingerprints, oil, grease, or other foreign material on the fusing roller and the external heating belt.
2) Do not leave the fusing roller in contact state for a long time.

2. Transit and delivery

No.	Content	Method
1	Implements, facility, and man power	Use a forklift. (If no forklift is available, manpower of two persons is required.)
2	Delivery	Transit must be made in packed condition.

A. Implements, facility, and manpower

It is recommended to use a forklift for bringing in the machine for safety.

If no forklift is available, man-power of two persons is required. The machine is considerably heavy, and requires safety precautions for delivery and installation.

Transit of the machine must be made in packed condition to the installing place.

Since the hard disk drive is built in the machine, use care not to exert vibrations or shocks to the machine when in transit.

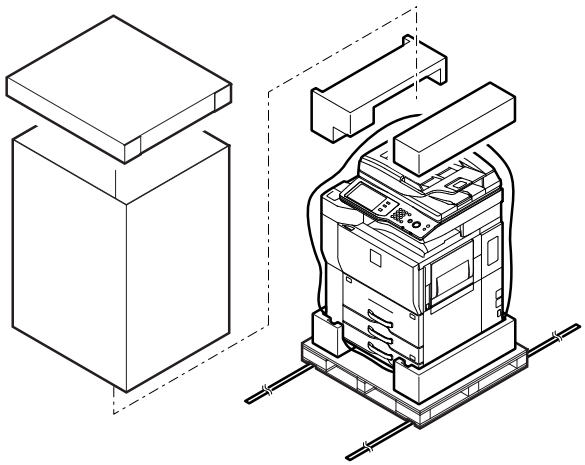
B. Delivery

Remove the packing materials prior to installation in the office environment.

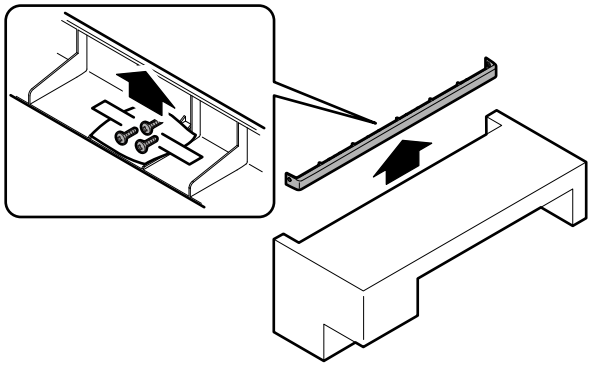
3. Unpacking

A. Unpacking procedure

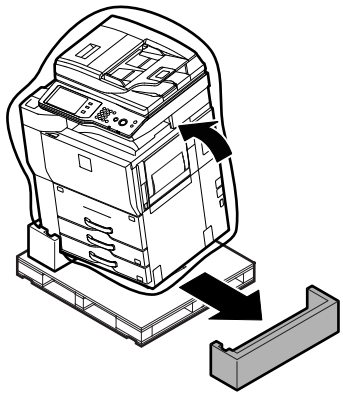
1) Remove the PP band.
2) Remove the top case.
3) Remove the top pads.



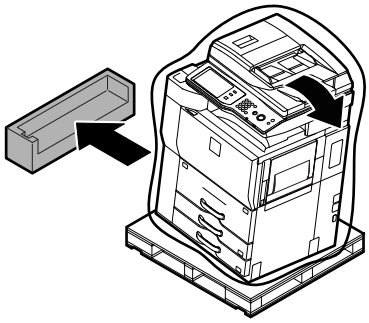
4) Remove the adjuster cover and the screw (in the bag) from the top pad L.



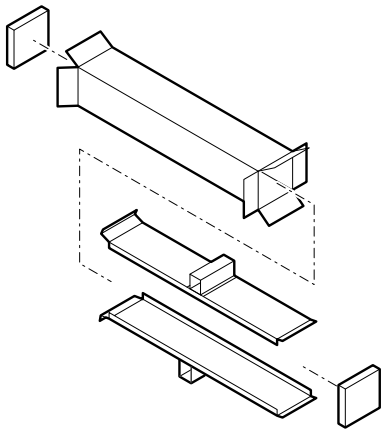
5) Lift the machine slightly, and remove the bottom pad L.



6) Lift the machine slightly, and remove the bottom pad R.



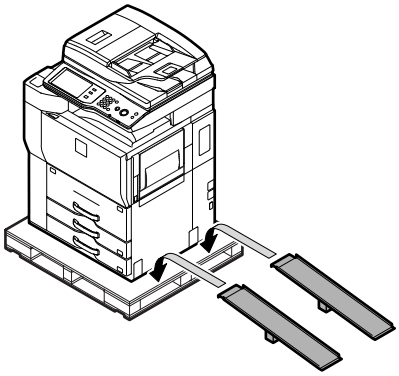
7) Remove the slope.



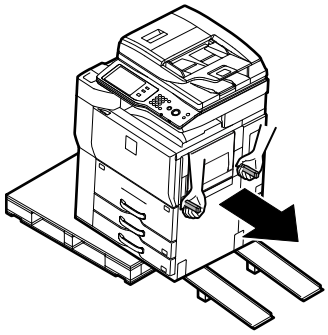
* Slope: Parts

Part name	Part code
Skid slope	DKiT-0367FCZZ

8) Attach the slope to the concave section of the skid.



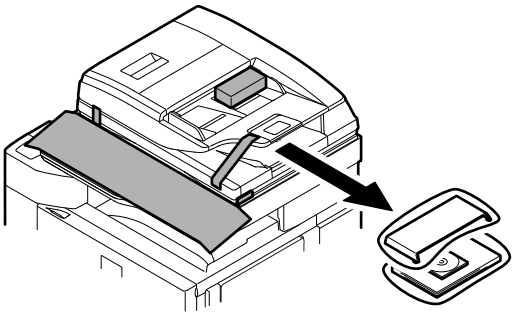
9) Hold the machine grips and push them down in the arrow direction.

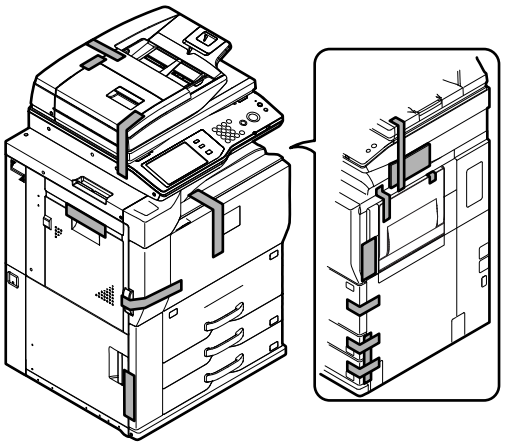


NOTE: This machine includes a hard disk drive, which must be protected against vibrations and shocks.
Never move the machine with the power ON.

NOTE: When the machine is moved over a bump, hold the grip on the right side of the machine to lift and cross the bump over. This is because the casters may be broken for a big bump.

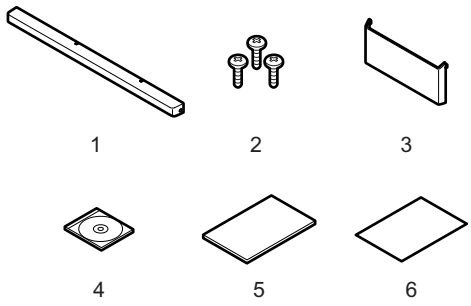
B. Removal of the fixing tape, protection material and parts packed together





C. Check the parts packed together

1) Check that all the parts are in the package.

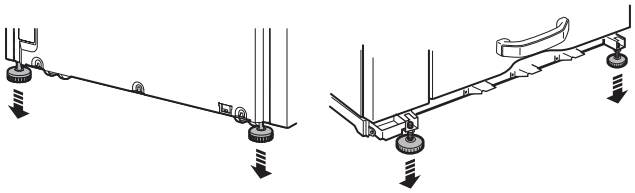


1	Adjuster cover	x 1
2	Adjuster cover fixing screw	x 3
3	Operation manual storage cover	x 1
4	Driver (CD-ROM)	x 1
5	Operation manual	x 1
6	Delivery and installation report	x 1

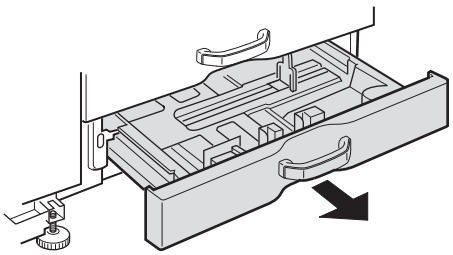
4. Installation

A. Adjuster cover installation

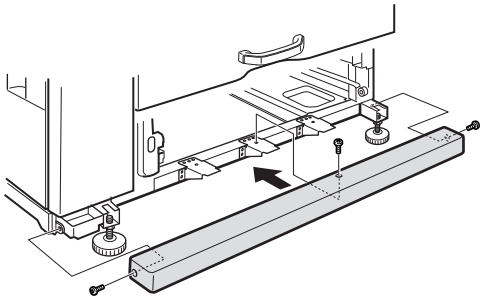
1) Move the main unit to the installing position, and turn the adjuster to fix the main unit.



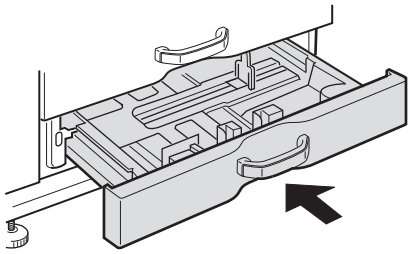
2) Remove the bottom tray from the main unit.



3) Install the adjuster cover to the main unit.



4) Insert the bottom tray into the main unit.

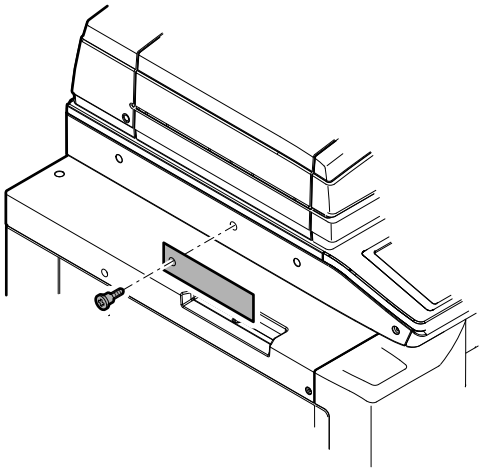


B. Lock release

	Lock position
1	No. 2/3 mirror base lock screw
2	Tray rotation plate fixing material

(1) No. 2/3 mirror base lock release

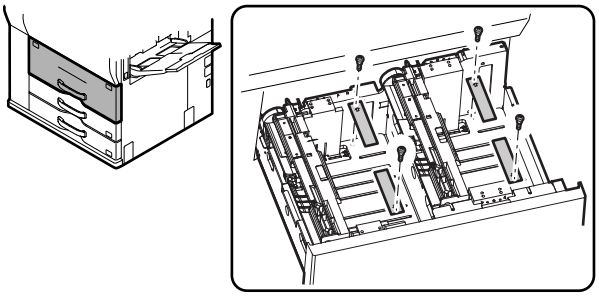
Remove the No. 2/3 mirror base fixing screw and the label of note for unpacking on the left side.



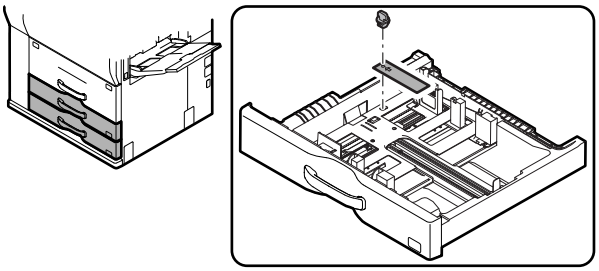
(2) Tray rotation release plate lock release

Remove the paper feed tray rotation plate fixing screw and the label of note for tray.

[Tray 1, Tray 2]

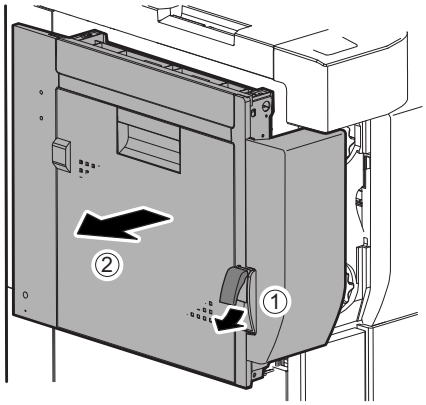


[Tray 3, Tray 4]

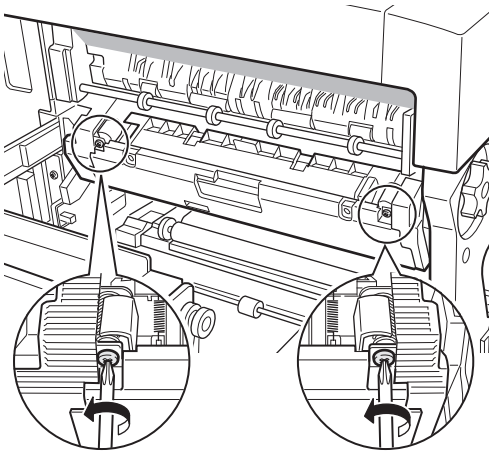


C. Press the fusing section (upper and lower heat rollers) and remove the process separation pawl fixing block.

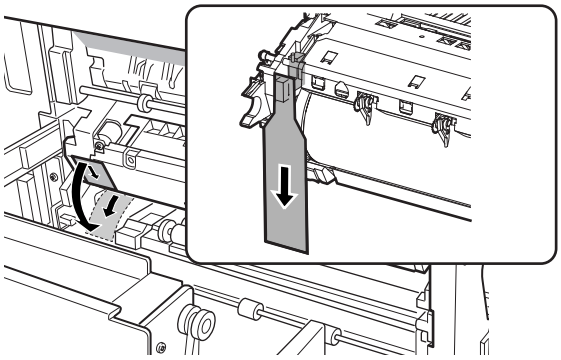
1) Pull the knob on the left door to pull out the left door.



2) Turn the pressing screw in the fusing section as shown in the figure below (fully loosen them) to press the heat rollers together.



3) Remove the separation pawl fixing block from the process unit.

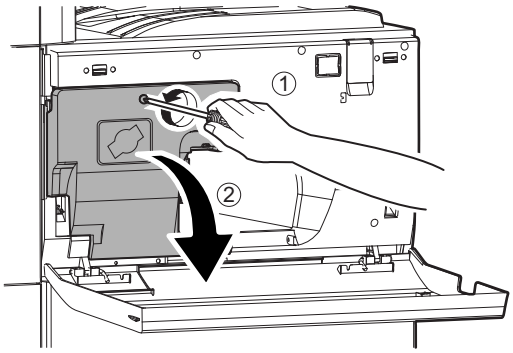


4) Replace the left door.

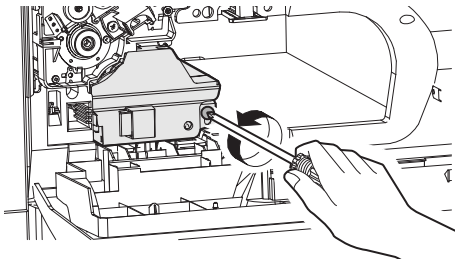
D. Set developer

(1) Supply developer

1) Open the front cabinet.
2) Loosen the blue screw of the process cover, and tilt down the process cover toward you.

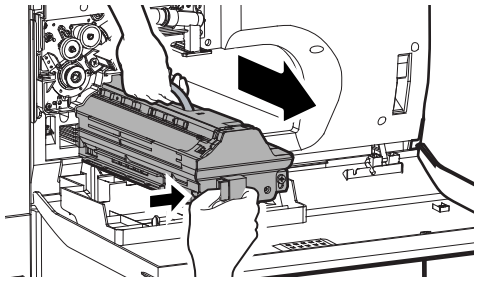


3) Loosen the blue screw which is fixing the developing unit.

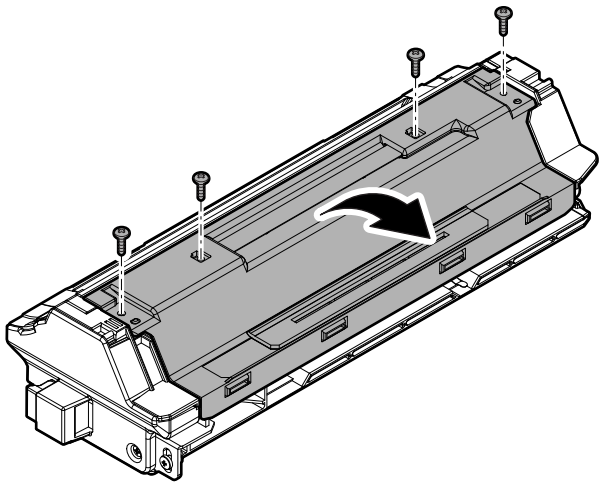


4) While pressing the developing unit lock lever, pull out the developing unit.

   Hold the strap of the developing unit and remove the developing unit.

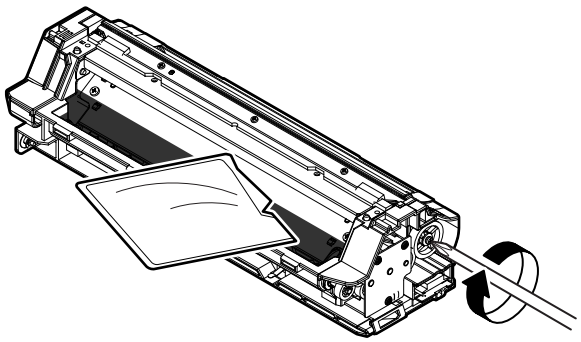


5) Remove the screws and remove the DV cover.



6) While supplying developer to the developer supply port of the developing unit, turn the MG gear clockwise with a plus screwdriver to supply all developer to the developing unit.

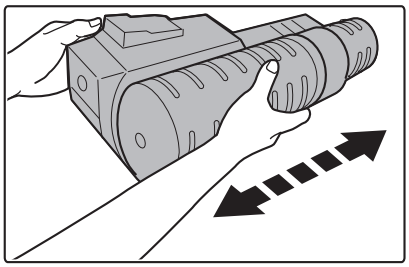
NOTE: When supplying developer, do not touch the MG roller with bare hands.



7) Install the DV cover to the developing unit.
8) Insert the developing unit to the main unit and fix it with the blue screw.
9) Close the process cover and fix it with the blue screw.

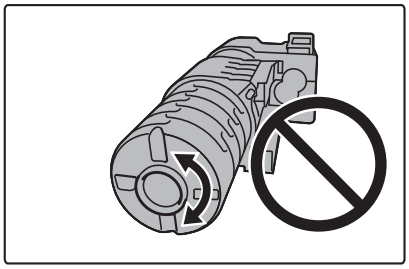
(2) Toner set

1) Remove the toner cartridge from the box, and shake it several times horizontally.

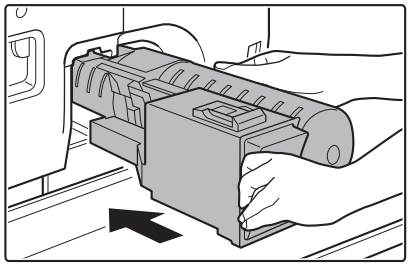


NOTE: Be sure to shake the toner cartridge horizontally.

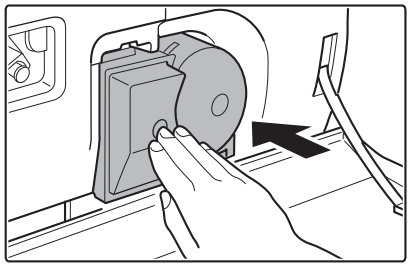
NOTE: Be careful not rotate as shown in the figure below.



2) Insert the toner cartridge into the main unit insertion port as shown below. In this case, do not turn the cartridge.



3) Insert the toner cartridge until it is locked.



(3) Set the toner density reference control level

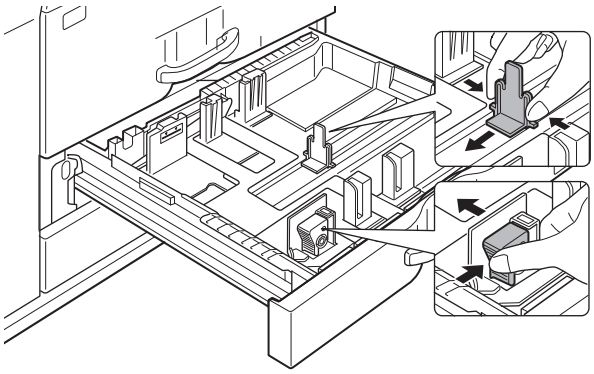
Insert the power plug into the power outlet. With the front cabinet open, turn on the power switch of the main unit.

1) Enter the SIM 25-2 mode.
2) Close the front cabinet.
3) Press [EXECUTE] key to execute the simulation. Toner is stirred for 3 minutes. The average level of the sensor detection level is set (stored) as the reference toner density control value.

E. Paper size change

(1) Tray 3 or tray 4 paper size change

1) Pull out the tray 3 or the tray 4.
2) Hold and slide the fixing knob (slide system) of the partition plates A and B to fit with the size of paper to be supplied.



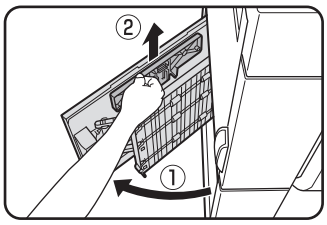
3) Supply paper into the tray.
4) Push the tray.

NOTE: Note that a certain special paper cannot be used for tray 4. To use special paper, use tray 3.

(2) Tab paper setting

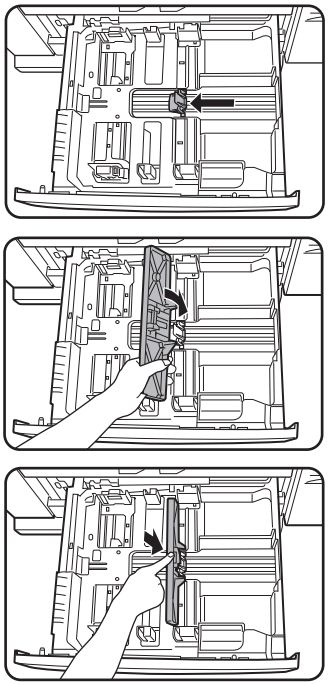
To use tab paper, install the exclusive-use guide tray 3.
Note that tray 4 cannot be used.

1) Remove the exclusive-use guide from the storage position left inside of the machine.

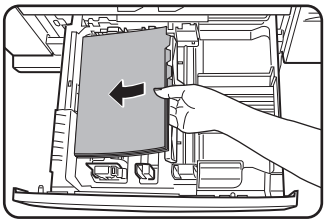


2) Pull out tray 3.

3) Slide the partition plate to tab paper as shown in the figure below and install it so that it covers the partition plate.



4) Supply tab paper with the print face up into tray 3.



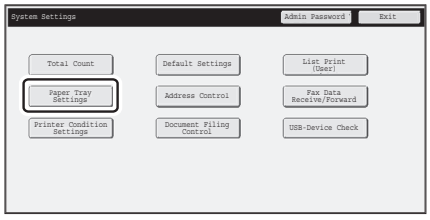
5) Push in tray 3.

(3) Changing the tray settings

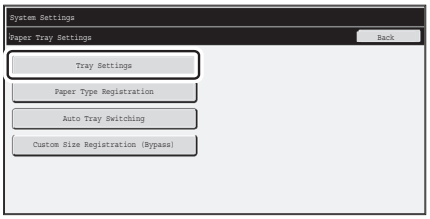
When you change the paper in a tray, the tray settings in the system settings must also be changed.

1) Press the [SYSTEM SETTINGS] key.

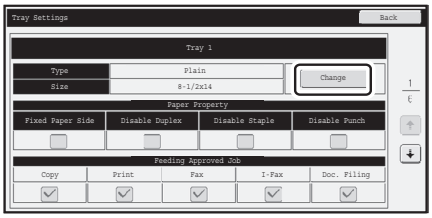
2) Configure the tray settings in the touch panel.
Touch the [Paper Tray Settings] key.



3) Touch the [Tray Settings] key.



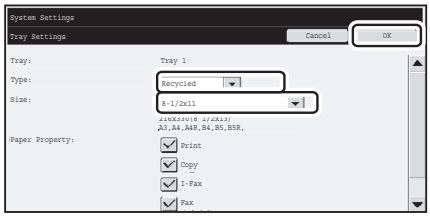
4) Touch the [Change] key in “Tray 1”.



5) Select [Recycled] from the “Type” select box.

6) Make sure that [Auto-Inch] is selected in the “Size” select box.

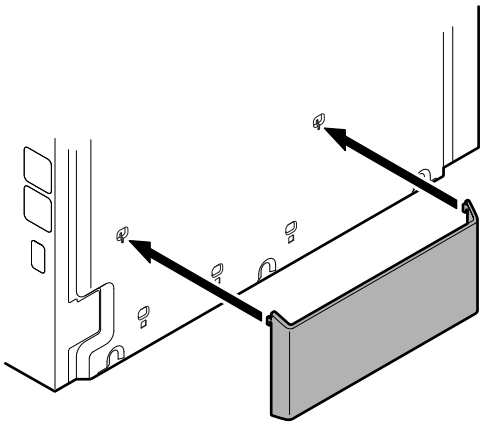
7) Touch the [OK] key.
The above steps change the paper settings for tray 1 to 8-1/2” x 11” recycled paper.



F. Other parts setting

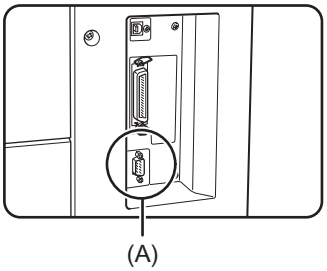
(1) Operation manual storage cover installation

1) Install the operation manual storage cover to the rear cabinet.



(2) Other notes

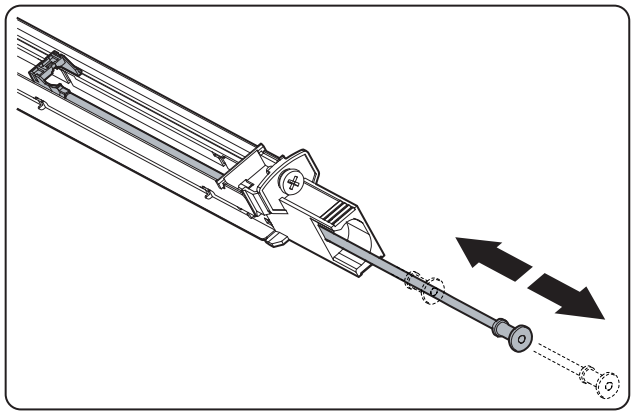
Check to insure that the cable connected to the service terminal (A in the figure below) is 3m or less.



G. Cleaning

(1) Main charger

1) Reciprocate the MC cleaner shaft back and forth to clean the electrode tip.



H. Specifications setup

Used to set the specifications with SIM26 according to the customer's request.

SIM No		Content
26	6	Used to set the destination.

To customize the following items after completion of the destination setup, change the set values.

SIM No		Content
26	2	LCC paper size setting
	3	Used to set the auditor specification mode.
	5	Used to set the count mode of the total counter and the maintenance counter.
	18	Used to set YES/NO of the toner save mode (Only in UK and Japan versions) * For other destination versions, this setup is made by the user program.
	52	Used to set YES/NO of counting when non-print paper is passed through each counter.
	53	Used to set YES/NO of user calibration permission.
	65	Used to set the limit number of sheets for stapling.

I. Image quality check

(1) Copy density and gradation check

NOTE: Before checking the copy density and gradation, be sure to execute the following jobs.

* Execute the high density image correction (Process correction) forcibly. (SIM 44-6)
* Execute the half-tone image correction forcibly. (SIM 44-26)

(Method)

Make a copy of the gray test chart (UKOG-0162FCZZ), and check that it is proper.

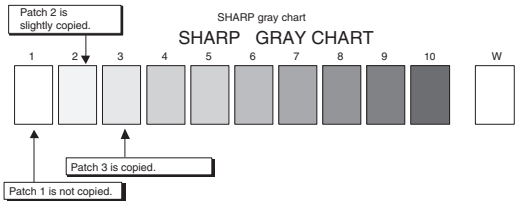
Note for checking the copy mode density

To check the density, use the gray test chart (UKOG-0162FCZZ). Set the copy density level to “Manual 3” in the Text/Printed Photo mode (Manual).

In addition, all the picture quality adjustment settings in the user adjustment mode must be set to the default (center).

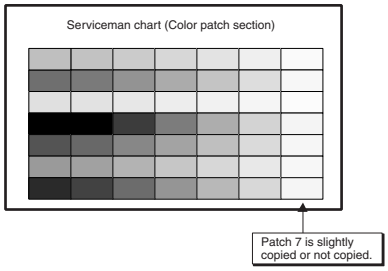
[Check with the gray test chart (UKOG-0162FCZZ)]

In the copy density check with the gray test chart, check to insure the following conditions.



[Check with the servicing color test chart (UKOG-0317FCZZ/ UKOG-0317FC11 or UKOG-0326FCZZ/UKOG-0326FC11)]

Check to confirm that it is in the conditions shown below.



(2) Printer density and gradation check

If no printer option is installed to the U model, the following procedures are not required. (SIM64-5 does not operate.)

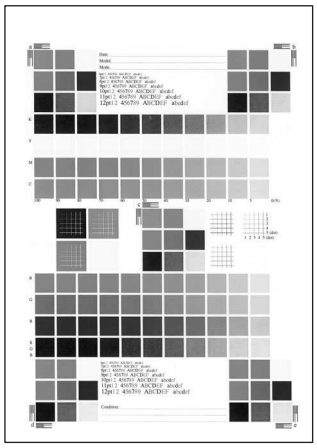
NOTE: Before checking the printer density and gradation, be sure to execute the following jobs.

* Execute the high density image correction (Process correction) forcibly. (SIM 44-6)
* Execute the half-tone image correction forcibly. (SIM 44-26)

(Method 1)

Execute SIM 64-5 to print the print test pattern.

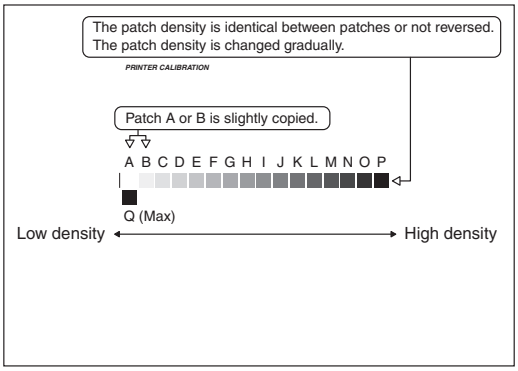
Set each set value to the default and press [EXECUTE] key. The print test pattern is printed.



The print density must be changed gradually from the lighter level to the darker level. The density changing direction must not be reversed.

(Method 2)

Execute SIM 67-25 to print the adjustment check pattern.


The patch density is identical between patches or not reversed.
The patch density is changed gradually.
PRINTER CALIBRATION
Patch A or B is slightly copied.
A B C D E F G H I J K L M N O P
Q (Max)
Low density
High density

The print density must be changed gradually from the lighter level to the darker level. The density changing direction must not be reversed.

Patch A or B is slightly copied.

J. Function and operation check

Check that the following operations are normal.

Check item list		Equipped condition
Key-in (operation panel)		
Display (operation panel)		
Paper feed operation	Hand feed	
	Main unit paper tray	
	Desk unit paper feed tray	With the desk unit installed
Paper size detection		
Originals size detection	Original table mode	
	DSPF mode	
	RSPF mode	
DSPF/RSPF operation / two sided copy	S-S mode	
	D-S mode	
	S-D mode	
	D-D mode	
Bookbinding operation		When the finisher is installed
Stapling operation		When the finisher is installed
Grouping operation		When the finisher is installed
Sorting operation		When the finisher is installed
Paper exit operation		When the exit tray unit (MX-TRX2) is installed

K. Setup and adjustment data recording

Print the various setup data and the adjustment data (list) with SIM22-6 and keep the data.

- In case of a memory trouble, if the data are not kept, all the adjustments must be made again.
- If the data are kept, the setup values and the adjustment values can be entered without adjustments, shortening the servicing time.

L. Necessary procedures before moving the machine

1) If the following options are installed, remove all of them from the machine.
   - Finisher
   - Large capacity tray
2) Remove the following consumable parts from the machine.
   - Paper
   - Toner cartridges
   - Development cartridge
3) Lock the following sections.
   - Scanner (Optical section)
   - Paper cassette lift plate
4) Remove the adjuster cover, and lift the adjuster.

NOTE: Since the hard disk drive is built in the machine, use care not to exert vibrations or shocks to the machine when in transit.

M. USB PORT selection

There are two USB ports; one on the front frame side and the other on the rear frame side. Only one of them can be used at a time. Do not connect the two USB ports simultaneously.

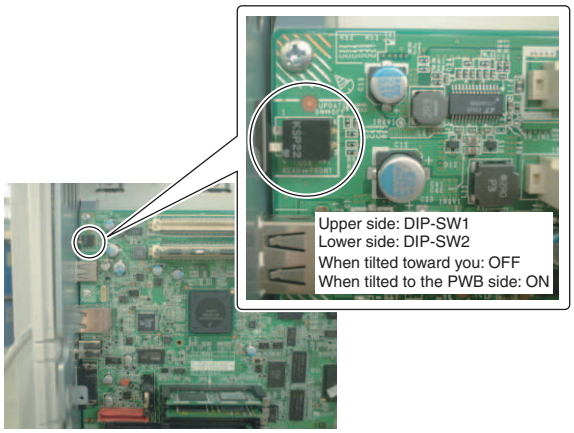
When shipping, the port on the front frame side is valid and the port on the rear frame side is invalid. When using the USB port, be careful of the total current consumption not to exceed 500mA.

The valid port can be switched by changing the setting of the MFP PWB DIP SW.

Select the valid USB port according to the user's request.

* The default setting for SW1/SW2 is OFF.

MFP PWB DIP SW		USB I/F	
SW 1	SW 2	Port on the front frame side	Port on the rear frame side
OFF	OFF	Valid	Invalid
OFF	ON	Invalid	Valid



NOTE: After completion of option installation, revise all the firmware to the latest version.